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WHAT IS CLAIMED IS:

- 1. A method of treating a disease or disorder, comprising: administering a tetracycline or tetracycline-like compound, whereby the disease or disorder is treated or prevented, and wherein the disease, condition or disorder is selected from the group consisting of multiple sclerosis, rheumatoid arthritis, acute cardiovascular events, cachexia, inflammatory bowel disease, polytrauma and Crohn's disease.
- 2. The method of claim 1, wherein the tetracycline compound is selected from the group consisting of chlortetracycline, demeclocycline, doxycycline, methacycline, minocycline, oxytetracycline and tetracycline.
- 3. The method of claim 1, wherein the disease, condition or disorder is multiple sclerosis.
- 4. The method of claim 1, wherein the disease, condition or disorder is a flare-up or acute phase of multiple sclerosis.
- 15 5. The method of claim 3, wherein the tetracycline compound is selected from the group consisting of chlortetracycline, demeclocycline, doxycycline, methacycline, minocycline, oxytetracycline and tetracycline.
- 6. The method of claim 1, wherein the tetracycline compound is selected from the group consisting of 4-dedimethylaminotetracycline, 4-20 dedimethylamino-5-oxytetracycline, 4-dedimethylamino-7-chlortetracycline, 4-hydroxy-4-dedimethylaminotetracycline, 5a,6-anhydro-4-hydroxy-4-dedimethylaminotetracycline, 6a-deoxy-5-hydroxy-4-dedimethylaminotetracycline, 6-demethyl-6-deoxy-4-dedimethylaminotetracycline, 4-dedimethylamino-12a-deoxytetracycline, 4-dedimethylamino-
- 25 11-hydroxy-12a-deoxytetracycline, 12a-deoxy-4-deoxy-4-dedimethyl-aminotetracycline, 6α-deoxy-5-hydroxy-4-dedimethylaminodoxycycline, 12a,4a-anhydro-4-dedimethylaminotetracycline, 7-dimethylamino-6-demethyl-6-deoxy-4-dedimethylaminotetracycline, 6a-benzylthiomethylenetetracycline, 2-nitrilo analogs of tetracycline (tetracyclinonitrile), mono-N-
- alkylated amide of tetracycline, 6-fluoro-6-demethyltetracycline, 11a-chlortetracycline, tetracycline pyrazole, 12a-deoxytetracycline, 4-

de(dimethylamino)tetracycline (CMT-1), tetracyclinonitrile (CMT-2), 6-demethyl-6-deoxy-4--de(dimethylamino)tetracycline (CMT-3), 7-chloro-4-de(dimethylamino)tetracycline (CMT-4), tetracycline pyrazole (CMT-5), 4-hydroxy-4-de(dimethylamino)tetracycline (CMT-6), 4-de(dimethylamino)-

- 12α-deoxytetracycline (CMT-7), 6-deoxy-5α-hydroxy-4-de(dimethylamino)tetracycline (CMT-8), 4-de(dimethylamino)-12α-deoxyanhydrotetracycline (CMT-9), 4-de(dimethylamino)minocycline (CMT-10), 5-ozytetracycline, 7-chlortetracycline, 6-deoxy-5-oxytetracycline, 6-deoxytetracycline, 6-deoxy-6-demethyltetracycline, 7-bromotetracycline, 6-demethyl-7-
- 10 chlortetracycline, 6-demethyltetracycline, 6-methylenetetracycline, 11a-chloro-6-methylenetetracycline, 6-methylene-5-oxytetracycline and 11a-chloro-6-methylene-5-oxytetracycline.
- 7. The method of claim 3, wherein the tetracycline compound is selected from the group consisting of 4-dedimethylaminotetracycline, 4-dedimethylamino-7-dedimethylamino-5-oxytetracycline, 4-dedimethylaminotetracycline, 5a,6-anhydro-4-hydroxy-4-dedimethylaminotetracycline, 6a-deoxy-5-hydroxy-4-dedimethylaminotetracycline, 6-demethyl-6-deoxy-4-dedimethylaminotetracycline, 4-dedimethylamino-12a-deoxytetracycline, 4-dedimethylamino-11a-bydroxy-12a-deoxytetracycline, 12a-deoxy-4-deoxy-4-dedimethyl-
- 11-hydroxy-12a-deoxytetracycline, 12a-deoxy-4-deoxy-4-dedimethylaminotetracycline, 6α-deoxy-5-hydroxy-4-dedimethylaminodoxycycline, 12a,4a-anhydro-4-dedimethylaminotetracycline, 7-dimethylamino-6-demethyl-6-deoxy-4-dedimethylaminotetracycline, 6a-benzylthiomethylenetetracycline, 2-nitrilo analogs of tetracycline (tetracyclinonitrile), mono-N-alkylated amide of tetracycline, 6-fluoro-6-demethyltetracycline, 11a-
- alkylated amide of tetracycline, 6-fluoro-6-demethyltetracycline, 11a-chlortetracycline, tetracycline pyrazole, 12a-deoxytetracycline, 4-de(dimethylamino)tetracycline (CMT-1), tetracyclinonitrile (CMT-2), 6-demethyl-6-deoxy-4--de(dimethylamino)tetracycline (CMT-3), 7-chloro-4-de(dimethylamino)tetracycline (CMT-4), tetracycline pyrazole (CMT-5), 4-
- 30 hydroxy-4-de(dimethylamino)tetracycline (CMT-6), 4-de(dimethylamino)-12α-deoxytetracycline (CMT-7), 6-deoxy-5α-hydroxy-4-de(dimethyl-

amino)tetracycline (CMT-8), 4-de(dimethylamino)-12a-deoxyanhydrotetracycline (CMT-9), 4-de(dimethylamino)minocycline (CMT-10), 5-ozytetracycline, 7-chlortetracycline, 6-deoxy-5-oxytetracycline, 6-deoxytetracycline, 6-deoxy-6-demethyltetracycline, 7-bromotetracycline, 6-demethyl-7-

5 chlortetracycline, 6-demethyltetracycline, 6-methylenetetracycline, 11a-chloro-6-methylenetetracycline, 6-methylene-5-oxytetracycline and 11a-chloro-6-methylene-5-oxytetracycline.